August 1, 2002

Dockets Management Branch (HFA-305)
Food and Drug Administration
5630 Fishers Lane
Rockville, MD 20852

Reference: Proposed Amendments to Guidelines for Voluntary Nutrition Labeling of Raw
Fruits, Vegetables, and Fish and Identification of the 20 Most Frequently Consumed
Raw Fruits, Vegetables, and Fish (Docket No. O1N-0548)

The Nutrient Data Laboratory, Agricultural Research Service, USDA is submitting the results of
the 2001-2002 nationwide sampling of fruits and vegetables to determine nutrient content. The
sample units of fresh produce were selected in retail markets in 12 locations over four regions
of the US. The multistage sampling design is documented in Perry *et al.* (Attachment A) These
foods were sampled at two different time periods during the year. Sample units of foods were
shipped via overnight express at refrigerator temperatures to the Food Analysis Laboratory
Coordination Center, Virginia Polytechnic Institute and State University. Sample units were
prepared and homogenized according to specific protocols developed especially for the nutrients
and foods of interest. Sample units were from up to 3 locations from each of 4 regions
composited or combined before chemical analysis to determine regional mean estimates for
nutrients. Analyses were conducted under carefully controlled analytical conditions by selected
commercial labs and other analytical experts.

Data are provided for 16 of the top 20 fruits on the FDA list: apple–five cultivars, avocado
(California Haas), banana, cantaloupe, grapefruit (red), honeydew, kiwifruit, nectarine, orange,
peach, pear–four cultivars, pineapple–two cultivars, plums (red), strawberries, sweet cherries,
and watermelon. Data are provided for 12 of the top 20 vegetables: bell pepper (red and green),
broccoli, carrot, celery, cucumber, iceberg lettuce, leaf lettuce (red and green), onion, potato–
russet, white and red, radish, sweet potato, and tomato.

Data are included for the following nutrients: moisture, nitrogen (protein), total fat, ash, dietary
fiber, total sugars, iron, calcium and vitamin A (β-carotene, α-carotene, and β-cryptoxanthin).
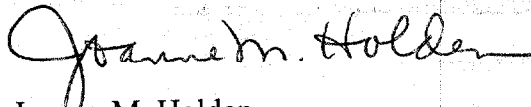Vitamin C, sodium and potassium were also determined but results are not yet available.

- Protein was calculated from nitrogen using the factor of 6.25.
- Calories are not calculated, but USDA calculates calories for fruits and vegetables using
  the Atwater factors and analytical values for protein, fat and carbohydrate.
- Individual carotenoids were analyzed at the Food Composition Laboratory, ARS, USDA
  Beltsville, MD using HPLC. We have not completed the analysis of carotenoids for:
  carrots, sweetpotatoes, cucumbers, onions, and sweet peppers.
- Analyses of proximates, sugar, fiber and minerals were done at three different analytical
  laboratories using the methods listed in Attachment B.

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Reports of individual data points for each food for the listed nutrients are in an MS Excel spreadsheet on the enclosed diskette and a duplicate copy. Please contact me concerning any questions or comments FDA staff may have regarding this submission.

Sincerely,

Joanne M. Holden
RESEARCH LEADER

cc: J. Judd, Acting Director
Beltsville Human Nutrition Research Center